



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/718,914

11/21/2003

Gerard Jakuszeski

09-9540-6520-0000-4

2405

7590

08/29/2006

Dana Andrew Alden
MacLean-Fogg Company
1000 Allanson Road
Mundelein, IL 60060

EXAMINER

SAETHER, FLEMMING

ART UNIT

PAPER NUMBER

3677

DATE MAILED: 08/29/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/718,914	JAKUSZESKI ET AL.	
	Examiner	Art Unit	
	Flemming Saether	3677	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 27-60 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 27-60 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Initially, it should be recognized that due to the similarity of the new claims of this application to those of the 10/430,794 application, this rejection generally mirrors the rejection set forth in the 10/430,794 application mailed 8/3/2006 with the reference to Hunckler (US 3,877,502) applied to show the first and second threaded ends.

Therefore, applicant should be aware that the claims of the 10/430,794 as they currently stand will be rejected as double patenting with the new claims of this application.

Information Disclosure Statement

Applicant's lengthy IDS filed 6/26/2006 has not yet been fully considered. A brief review of the documents contained therein revealed that most of the documents are unrelated to the claims of this application. Therefore, the applicant is requested to identify twenty or so documents most relevant to the claim of this application so that they may be given proper consideration by the examiner. Though now simply a request, it may be applied under Rule 105 in the future.

Election/Restriction

The examiner notes that the claims are directed to two distinct embodiments as seen in Fig. 2 and 9. However, since there is currently no additional burden on the examiner there is no restriction requirement.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 18, 21, 30 and 33 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The claimed ranges of 4° to 6° (claims 33, 45 and 56) and 6° to 8° (claims 36, 48 and 59) is considered new matter since only the entire range of 4° to 8° has been previously disclosed.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 12-34 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 12-34, 1-10 and 1-23 of copending Application Nos. 10/430,794 11/444,672 and 11/444,673 respectively in view of Hunckler. The claims of 10/430,794 claim the same features as the instant application except for the shaft having the thread at both ends. Hunckler discloses a fastener having a shaft with a thread at both ends (26 and 27). It would have been obvious for the skilled artisan to provide the claimed threads of 10/430,794 onto both ends of the shaft as disclosed in Hunckler in order to form an improved U-bolt for applications such as those disclosed in Hunckler. Although the conflicting claims of 11/444,672 and 11/444,673 are not identical, they are also not patentably distinct because the '672 application claims the same locking thread as the instant invention and '673 application additionally claims the curved guide threads.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 27, 30-32, 50, and 53-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hunckler (US 3,877,502) in view of Essom (US 4,973,209) and Garver (US 6,062,786). Hunckler discloses a male fastener (22) having first (at 26) and second (at 27) threaded ends each receiving a locking nut (28 and 29) but, does not disclose the guiding and locking thread structure as claimed. Essom discloses a threaded shaft having a trilobular shape (see Fig. 2). The thread includes a guide thread (at 24) opposite the head and a locking thread (at 26) axially spaced between the guide thread and the head. The locking thread is V-shaped or alternatively where the thread transition between the locking and the guide is also V-shaped. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to replace the threads of Hunckler with the threads as disclosed in Essom because the threads of Essom are an improvement in that they not only provide a locking of the nut without the additional canting member required on the bracket but also provide an alignment for proper threaded of the nut onto the shaft. Hunckler as modified by Essom does not disclose the guide thread being curved. Garver discloses a threaded stud including a guide thread which is disclosed as a curved thread (804; Figs. 7B and 9). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to replace the guide thread of modified with a curved thread as disclosed in Garver because Garver discloses that a curved guide thread is a well know alternative to the truncated guide thread disclosed in Essom (see Garver's Figs. 9A-9D).

Claims 28, 29, 33-36, 51, 52 and 56-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over modified Hunckler as applied to claims 27 and 50 above, and further in view of Evans (US 3,385,340). Hunckler as modified by Essom does not disclose the specific locking thread as claimed. Evans discloses a threaded stud (Figs. 6-8) including a locking thread provided with a root surface (56) which is angled at 6° (column 5, last line) to deform the threads of an internally threaded member (see Fig. 7). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to replace the locking thread of modified Hunckler with a locking thread as disclosed in Evans because the locking thread of Evans is superior in that it would provide a greater resistance to loosening, be less costly to manufacture and easier to install (Evans, column 1). The angle of the root surface forms a conical surface as shown in Evans while the tip has a cylindrical guide surface as disclosed in Essom.

Claims 37 and 60 are rejected under 35 U.S.C. 103(a) as being unpatentable over modified Essom as applied to claims 27 and 50 above, and further in view of McKinlay (US 5,626,449). McKinley discloses a nut assembly for use in combination with a threaded stud (10) comprising a nut (10) with an undulating annular surface (at 26) and a washer (16) with a clamping surface having protrusions and a bearing surface (at 28) with inclined faces facing the undulating surface. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to use the threaded stud of Hunckler in combination with the nut assembly of McKinlay in order to provide a

superior threaded connection which would be capable of withstanding increased vibrations without loosening.

Claims 38, 41 and 42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Essom (US 4,973,209). Hunckler discloses a male fastener (22) having first (at 26) and second (at 27) threaded ends each receiving a locking nut (28 and 29) but, does not disclose the guiding and locking thread structure as claimed. Essom discloses a threaded shaft having a trilobular shape (see Fig. 2). The thread includes a guide thread (at 24) opposite the head and a locking thread (at 26) axially spaced between the guide thread and the head. The locking thread is V-shaped or alternatively where the thread transition between the locking and the guide is also V-shaped. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to replace the threads of Hunckler with the threads as disclosed in Essom because the threads of Essom are an improvement in that they not only provide a locking of the nut without the additional canting member required on the bracket but also provide an alignment for proper threaded of the nut onto the shaft.

Claims 39, 40 and 45-48 are rejected under 35 U.S.C. 103(a) as being unpatentable over modified Hunckler as applied to claim 38 above, and further in view of Evans (US 3,385,340). Hunckler as modified by Essom does not disclose the specific locking thread as claimed. Evans discloses a threaded stud (Figs. 6-8) including a locking thread provided with a root surface (56) which is angled at 6°

(column 5, last line) to deform the threads of an internally threaded member (see Fig. 7). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to replace the locking thread of modified Hunckler with a locking thread as disclosed in Evans because the locking thread of Evans is superior in that it would provide a greater resistance to loosening, be less costly to manufacture and easier to install (Evans, column 1). The angle of the root surface forms a conical surface as shown in Evans while the tip has a cylindrical guide surface as disclosed in Essom.

Claims 43 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over modified Hunckler as applied to claim 38 above, and further in view of Kato (US 6,296,432). In regards to claims 43 and 44, the thread shown at 24 in Essom is read as the plateau thread thus is lacking the guide thread adjacent the plateau thread. Kato discloses a stud including a guide thread (at 104). At the time the invention was made, it would have been obvious for one of ordinary skill in the art to provide the smooth end surface of modified Hunckler (labeled 22 in Essom) with a guide thread as disclosed in Kato because Kato teaches the inclusion of the guide thread is an improvement over smooth surface (note Kato's prior art).

Claim 49 is rejected under 35 U.S.C. 103(a) as being unpatentable over modified Hunckler as applied to claim 38 above, and further in view of McKinlay (US 5,626,449). McKinley discloses a nut assembly for use in combination with a threaded stud (10) comprising a nut (10) with an undulating annular surface (at 26) and a washer (16) with

Art Unit: 3677

a clamping surface having protrusions and a bearing surface (at 28) with inclined faces facing the undulating surface. At the time the invention was made, it would have been obvious for one of ordinary skill in the art to use the threaded shaft of modified Hunckler in combination with the nut assembly of McKinlay in order to provide a superior threaded connection which would be capable of withstanding increased vibrations without loosening.

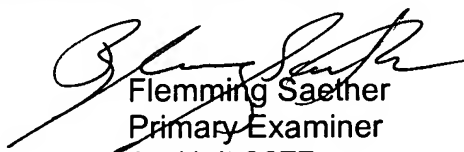
Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Flemming Saether whose telephone number is 571-272-7071. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann can be reached on 571-272-7075. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3677

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.


Flemming Sæther
Primary Examiner
Art Unit 3677